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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/855,535	05/16/2001	Karel van den Berg	8553/215	9769

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[REDACTED] EXAMINER

PIASCIK, SUSAN L

ART UNIT	PAPER NUMBER
3643	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/855,535	BERG ET AL.
	Examiner Susan L Piascik	Art Unit 3643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 28 February 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 49-79 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 49-79 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 2/28/2003 have been fully considered but they are not persuasive.

The Applicant argues that the van de Lely reference fails to teach an animal feeding system that *integrates* the feed containers with the feed troughs. The Examiner has modified the rejections and argues that integration of two separate entities into one final product is considered to be obvious to a skilled worker in the art. The van der Lely reference teaches all of the essential components of the Applicant's invention. A skilled worker looking to improve the system disclosed by van der Lely, would understand that if the process needs to be accomplished quicker and more efficiently, the feed containers and troughs should be incorporated into one unit. This claimed distinction is not found to be patentable in the Applicant's invention.

Further, in response to the Applicant's argument that there is no suggestion to combine the references, the Examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. *In re Nomiya*, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. *In re McLaughlin*, 170 USPQ 209 (CCPA 1971). References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. *In re Bozek*, 163 USPQ 545 (CCPA 1969).

In response to the Applicant's argument that the Examiner's conclusion of the obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. (*In re McLaughlin*, 443 F.2d 1392; 170 USPQ 209 (CCPA 1971))

In conclusion, the Examiner finds the Applicant's invention obvious to one having ordinary skill in the art given the prior art of record. See rejections below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 49-50, 53-58, 63-64, 66-68, 70-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over van der Lely ('833)

In regards to **claim 49**, van der Lely, teaches an apparatus for automatically detaching and displacing feed for animals which comprises a container (7) for the animal feed and an animal feed stand (3) for receiving the animal feed from the container. The animal feed stand (3) accommodates an animal to consume the animal feed. A robot arm (49) is constructed and

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arranged to move the animal feed from the container (7) to the animal feed stand (3). The robot arm (49) comprises a detaching means (48) for detaching part of the animal feed in the container (7) and displacing means for selectively displacing the detached part of the animal feed into the animal feed stand (3). Van der Lely fails to teach the animal feed stand (3) and the animal feed container to be "integrated." However, it would have been obvious to one having ordinary skill in the art at the time of the invention to integrate these two receptacles, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v Detroit Stove Works*, 150 U.S. 164 (1893).

Regarding **claim 50**, van der Lely, as modified, teaches an apparatus wherein the detaching means (48) comprises a gripping element.

In regards to **claim 53**, van der Lely, as modified, discloses an apparatus wherein the detaching means (48) comprises closure means.

Regarding **claim 54**, van der Lely, as modified, teaches an apparatus wherein the robot arm (49) comprises cleaning means (14) for cleaning the detaching means (48).

In regards to **claim 55**, van der Lely, as modified, teaches an apparatus wherein the robot arm (49) comprises brushing means (34) for brushing substances from the detaching means (48).

Regarding **claim 56**, van der Lely, as modified, teaches an apparatus wherein the cleaning means (14) comprises a sweeping element (unnumbered – see column 4, lines 30-35).

In regards to **claim 57**, van der Lely, as modified, teaches an apparatus wherein the brushing means (34) comprises a sweeping element (unnumbered – see column 4, lines 30-35).

Regarding **claim 58**, van der Lely, as modified, teaches an apparatus which comprises metering means that provides that the part of the animal feed comprises a predetermined

measured-out portion of animal feed which is detached by the detaching means. See column 5, lines 30-37.

In regards to **claim 63**, van der Lely, as modified, teaches an apparatus wherein the feed stand comprises a trough (4).

Regarding **claim 64**, van der Lely, as modified, teaches an apparatus in which the animal feed consists essentially of at least one of the following components: solid composites, a concentrate, silage, hay, fodder, a liquid including water or any mixture of the foregoing.

In regards to **claim 66**, van der Lely, as modified, teaches an apparatus wherein the robot arm (49) is disposed above the animal's feed stand.

Regarding **claim 67**, van der Lely, as modified, teaches an apparatus wherein the robot arm (49) is disposed above the container (7).

In regards to **claim 68**, van der Lely, as modified, teaches an apparatus wherein the robot arm (49) is disposed above the animal's feed stand and the container (7).

Regarding **claim 70**, van der Lely, as modified, teaches an apparatus wherein the detaching means (48) performs at least one function consisting of the following functions: the function of moving above the bottom of the container (7) or the function of moving along the bottom of the container (7) or the function of moving into the animal feed stand or any combination of these functions.

In regards to **claim 71**, van der Lely, as modified, teaches an apparatus which is supported on a floor wherein said robot arm (49) is movable above the floor.

Regarding **claim 72**, van der Lely, as modified, teaches an apparatus which comprises a rail (17) which is disposed over the floor wherein the robot arm (49) is movable along the rail (17).

In regards to **claim 73**, van der Lely, as modified, teaches an apparatus wherein the feed stand comprises a trough (4).

Regarding **claim 74**, van der Lely, as modified, teaches an apparatus wherein the trough (4) is below the feed container (7).

In regards to **claim 75**, van der Lely, as modified in claim 49, teaches an apparatus wherein the trough (4) and the container (7) are positioned in close proximity and disposed in a common vertical plane whereby the robot arm detaches feed from the container (7) and places feed into the trough (4) directly and rapidly. Once the elements were integrated, as shown in claim 49, it would have been obvious to one having ordinary skill in the art to position the elements in a desired manner, since it has been held that rearranging parts of an invention involves only routine skill in the art (*In re Japikse*, 86 USPQ 70).

In regards to **claim 76**, van der Lely, as modified, discloses an apparatus which comprises a transport vehicle (24) which is movable between the container (7) and the animal feed stand, wherein the transport vehicle (24) cooperates with the robot arm (49).

Regarding **claim 77**, van der Lely, as modified, discloses an apparatus which comprises a rail (17) and a transport vehicle (24) movable along the rail (17).

Claims 51 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over van der Lely ('833), as modified, in view of Wilman.

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In regards to **claim 51**, van der Lely, as modified, discloses the claimed invention except for specifying the detaching means comprising a bucket. However, as shown in the Wilman reference, it is well known in the art of material handling to use a bucket structure to pick up material for transporting. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the apparatus disclosed by van der Lely, to incorporate a bucket as a detaching means, to ensure that the feed is completely contained while in transport.

In regards to **claim 52**, van der Lely, as modified, discloses the claimed invention except for specifying the detaching means comprising a shovel. However, as shown in the Wilman reference, it is well known in the art of material handling to use a shovel structure (See Figure 4I) to pick up material for transporting. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the apparatus disclosed by van der Lely, to incorporate a bucket as a detaching means, to ensure that the feed is completely contained while in transport.

Claims 59-60, 65, 69 and 78-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over van der Lely ('833), as modified, in view of Beaudoin et al.

In regards to **claims 59 and 60**, van der Lely, as modified, discloses the claimed invention except for specifying a weighing means for the dispatched animal feed. However, Beaudoin et al. teach an automated feeder system having a weighing means (41). Therefore, it would have been obvious to one having ordinary skill in the art to modify the apparatus of van der Lely, to include a weighing tool, as shown by Beaudoin et al., so that an exact amount of

feed can be distributed to the animals. Further, it would have been obvious to place the weighing means on the robot arm of van der Lely, since it has already been shown that the robot arm houses the detachment means. Therefore, the weight measurement would need to be made when the feed is picked up by the robot arm and prior to the distribution into the trough.

Rearrangement of the parts of an invention involves routine skill in the art.

Regarding **claim 65**, van der Lely, as modified, discloses the claimed invention except for specifying an additional container of feed. However, Beaudoin et al. teach an automated feeder having two separate containers (21, 21') having different components of feed. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the apparatus of van der Lely, to include additional feed containers, as shown by Beaudoin et al., so that varieties of feed may be given to the animals.

In regards to **claim 69**, van der Lely, as modified, discloses the claimed invention except for specifying a chute to discharge the feed. However, Beaudoin et al. teach an automated feeder a conveyor belt leading to a chute (69, 69') in order to distribute the feed into the trough (71, 71'). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the apparatus of van der Lely, to include a chute, as shown by Beaudoin et al., as an alternative distribution method.

Regarding **claim 78**, van der Lely, as modified, teaches an apparatus for automatically detaching and displacing animal feed for consumption by animals comprising a plurality of troughs (4) for receiving animal feed from a container (7). A robot arm (49) is constructed and arranged to move the animal feed from the containers to at least one the troughs (4). The robot arm comprises detaching means (48) for detaching a portion of the animal feed from the

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container and displacing means for selectively displacing a portion of the feed into the trough (4). The detaching means (48) essentially consists of a gripping element or a bucket or a shovel. Van der Lely fails to teach a plurality of feed containers. However, Beaudoin et al. teach an automated feeder having two separate containers (21, 21') having different components of feed. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the apparatus of van der Lely, to include additional feed containers, as shown by Beaudoin et al., so that varieties of feed may be given to the animals.

Regarding claim 79, van der Lely, as modified, teaches an apparatus for automatically detaching and displacing animal feed for consumption by animals comprising a plurality of troughs (4) in the feeding station for receiving animal feed from a container (7). A bendable (see Figure 3 of van der Lely) robot arm (49) is constructed and arranged to move the animal feed from the containers to at least one the troughs (4). The robot arm comprises detaching means (48) for detaching a portion of the animal feed from the container and displacing means for selectively displacing a portion of the feed into the selected trough (4). Van der Lely fails to teach a plurality of feed containers. However, Beaudoin et al. teach an automated feeder having two separate containers (21, 21') having different components of feed. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the apparatus of van der Lely, to include additional feed containers, as shown by Beaudoin et al., so that varieties of feed may be given to the animals.

Claims 61 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over van der Lely ('833), as modified, in view of Fox.

In regards to **claims 61 and 62**, van der Lely discloses the claimed invention except for specifying an animal identification means in the immediate vicinity of the trough. However, Fox teaches an automated feeder system having an animal identification system (42). Therefore, it would have been obvious to one having ordinary skill in the art to modify the apparatus of van der Lely, to include an animal identification means, as shown by Fox, so that the proper amount and correct mixture of feed is dispatched from the displacement means. Further, it would have been obvious to one having ordinary skill in the art to place the ID system on the robot arm since it has been held that rearranging parts of an invention requires only routine skill in the art. Also, since it has already been shown that the robot arm houses the detachment means, it is crucial for the ID means to be located on the arm, so that information can be gathered and transmitted before the feed is dispensed into the trough.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan L Piascik whose telephone number is (703)305-0299. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on (703)308-2574. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-7687 for regular communications and (703)305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-7687.

slp

June 24, 2003


PETER W. POON
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